

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Modernizing the E-Rate Program for	)	WC Docket No. 13-184
Schools and Libraries	)	

**REPLY COMMENTS OF THE OHIO INFORMATION TECHNOLOGY CENTERS**

On behalf of more than 600 school districts, the Ohio Information Technology Centers (“Ohio ITCs”)<sup>1</sup> are pleased to provide these Reply Comments on the Commission’s recent Notice of Proposed Rulemaking (the “*Category 2 NPRM*”) in the above-captioned docket concerning Category 2 support provided under the Commission’s Schools and Libraries (“E-rate”) Universal Service Support Mechanism.<sup>2</sup> The Commission proposes “to make the category two budget approach permanent and seek comment on potential modifications that could simplify the budgets, decrease the administrative burden of applying for category two services, and thereby speed the deployment of Wi-Fi in schools and libraries across the country.”<sup>3</sup> The Ohio ITCs fully support the Commission’s proposal to make the E-rate Category 2 budget permanent, along with other critical modifications that will anchor program stability, significantly streamline and simplify the processes, and allow for better strategic planning and technology acquisition.

**Background**

The Ohio ITCs are licensed by the Ohio Department of Education under Ohio Rev. Code § 3301.075 to operate a portion of the Ohio Education Computer Network (“OECN”). Under Section 3301.075, each ITC may be comprised of “combinations of school districts and

---

<sup>1</sup> Undersigned counsel represents fifteen of the eighteen Ohio ITCs, namely CONNECT, HCC, SPARCC, NOACSC, LACA, SWOCA, NEONET, NEOMIN, NOECA, NWOCA, META Solutions, LGCA, MVECA, ACCESS, and OME-RESA (“Ohio ITCs”).

<sup>2</sup> *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Notice of Proposed Rulemaking, FCC 19-58 (rel. July 9, 2019) (the “*Category 2 NPRM*”).

<sup>3</sup> *Id.* at ¶ 3.

educational service centers having sufficient students to support an efficient, economical comprehensive program of computer services to member districts and educational service centers.” As participants in the OECN, the Ohio ITCs may offer, among other things, Voice over Internet Protocol services, Internet access services, and internal broadband connections sold as Managed Internal Broadband Services (“MIBS”) to their members. In addition, many of the Ohio ITCs are individually organized as a Regional Council of Governments (“RCOG”) under Ohio Rev. Code Chapter 167.

Ohio has approximately 1.6 million public school students in 612 public school districts, 49 vocational technical schools, 52 Educational Service Centers, and several hundred charter schools, as well as approximately 170,000 private and parochial students in 716 private and parochial schools. The state is also home to more than 251 public library systems with 481 branch locations. For Ohio K-12 schools, the total pre-discount Category 2 funding requested from FYs 2015-2019 equals approximately \$174,535,730.00, and the total post-discount Category 2 funding requested equals approximately \$120,299,045.00. The Ohio ITCs serve the majority of school districts and nonpublic private and parochial schools, as well as libraries.

### **Discussion**

In 2014, the Commission adopted two companion orders that, together, modernized the E-rate support mechanism to meet the needs of today’s schools and libraries.<sup>4</sup> These *E-rate Modernization Orders* established a more equitable approach to Category 2 funding for all E-rate applicants and established an initial five-year budget to test this approach. The *Second E-rate*

---

<sup>4</sup> *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Report and Order and Further Notice of Proposed Rulemaking, FCC 14-99, 29 FCC Rcd 8870 (2014) (“*E-rate Modernization Order*”); *Modernizing the E-rate Program for Schools and Libraries*, WC Docket No. 13-184, Second Report and Order and Order on Reconsideration, FCC 14-189, 29 FCC Rcd 15538 (2014) (“*Second E-rate Modernization Order*”). These comments shall refer to these orders, taken together, as the “*E-rate Modernization Orders*”).

*Modernization Order* required the Wireline Competition Bureau (the "Bureau") to report its findings on the first four years of Category 2 as that initial test period was drawing to a close,<sup>5</sup> which the Bureau did in early 2019.<sup>6</sup> Numerous comments and reply comments were filed in response to that *Cat 2 Report* in support of permanently replacing the prior two-in-five-year rule with an improved version the Category 2 budget process trialed under the *E-rate Modernization Orders*. The majority of commenters on the *Cat 2 Report* supported a district-wide budget and an increase in the budget multiplier and minimum per-building budget floor. The majority of commenters in this proceeding not only continue to support the same approach, but also do so with more robust surveys and analyses. The Ohio ITCs likewise agree with these changes.

#### **A. The Ohio ITCs Support Making the Category 2 Budget Permanent**

The Commission's proposal to make the Category 2 budget permanent in the *Category 2 NPRM*<sup>7</sup> is sound on all counts, and far superior to the former two-in-five-year rule. More than 60 comments have been filed in this proceeding, and the weight of the record so far supports the Commission's proposal.<sup>8</sup> The Ohio ITCs echo this support, having experienced first-hand the significant benefits of this funding approach to the schools throughout Ohio.

In the trial period between Funding Years 2015-2019, as mentioned above, Ohio K-12 schools requested over \$120 million in Category 2 support for some \$175 million in pre-discount Category 2 equipment and services. This support has expanded the range of education resources

---

<sup>5</sup> *Second E-rate Modernization Order* at ¶ 93.

<sup>6</sup> *Modernizing the E-Rate Program for Schools and Libraries*, WC Docket No. 13-184, Report, DA 19-71, 34 FCC Rcd 319 (Wir. Comp. Bur. 2019) ("*Cat 2 Report*").

<sup>7</sup> *Cat 2 NPRM* at ¶ 14.

<sup>8</sup> See, e.g., State E-rate Coordinators' Alliance and Schools, Health, & Libraries Broadband Coalition Joint Initial Comments ("Joint SECA/SHLB Comments") at 3-4; Comments of Funds for Learning, LLC on Making the Category Two Budget Approach Permanent and Other Modifications to the Category Two Budget Approach at 4 ("FFL Comments"); California Department of Education Comments ("CA DoE Comments") at 2; Pennsylvania Department of Education Comments ("PA DoE Comments") at 3-4; State of South Carolina Comments at 1.

in Ohio's schools, and contributed to broad, across-the-board increases in student achievement among multiple grades and areas of study, as measured by statewide testing between 2015 and 2018.<sup>9</sup> Reflecting these increases, high school graduation rates are once again increasing, after leveling off in 2014.<sup>10</sup>

Continued access to Category 2 support under the current budget process (improved as suggested below) is critical to allow Ohio's schools to continue to serve the needs of the next generation best. Category 1 telecommunications and Internet access services supported by E-rate are critical to the modern education process, providing students with access to the latest advances in human knowledge and research developments, and supporting advanced learning tools and resources. However, those services can only reach their full potential when every student, in every classroom, can access them. Category 2 support is essential to enable the internal connections and maintenance services needed to create that access. The current budget process better allows schools to plan and manage their approaches to technology, and to receive the necessary support to make those plans a reality.

### **B. Ohio ITCs Support Improvement to the Category 2 Process**

The Commission wisely set an initial five-year budget cycle and required the Bureau to report its analysis and findings based on the first four years of the Category 2 Budget Process.<sup>11</sup> In doing so, the Commission gave all E-rate stakeholders the opportunity aspects of the approach that are working well, as well as to identify areas for improvement that would lead to a more streamlined, cost-efficient, and successful Category 2 administrative process for the applicants and USAC alike.

---

<sup>9</sup> See Ohio Dep't of Education, "Ohio School and District Results 2017-2018," at 3 (observing that, "[a]chievement is increasing across the state, from every corner and across student demographics"), available at: [https://reportcardstorage.education.ohio.gov/search/State\\_Report\\_Card.pdf](https://reportcardstorage.education.ohio.gov/search/State_Report_Card.pdf).

<sup>10</sup> *Id.*

<sup>11</sup> *Second E-rate Modernization Order* at ¶ 93.

# **1. The Commission Should Eliminate a Single Building Budget Approach and Adopt a District-Wide Budget Approach**

The Ohio ITCs join the majority of commenters in supporting a shift from a single building budget approach to a district-wide budget approach.<sup>12</sup> Much of today's networking equipment is designed to support network functions across multiple locations.<sup>13</sup> In the E-rate context, this means that much of the network equipment supported by Category 2 today provides network functionality in at least some degree among multiple schools. Allocating the cost of that equipment is a burdensome, *ad hoc* exercise that contributes little to ensuring cost-effective E-rate procurement or to safeguarding against waste, fraud, or abuse.<sup>14</sup> Moreover, to the extent that the allocation process could become subject to greater scrutiny during the USAC approval process, it may actually encourage less efficient network designs or purchasing decisions where equipment that could be shared is instead dedicated to a single physical location.

A single, district-wide budget also provides applicants with more flexibility to respond to site-specific idiosyncrasies that a fixed, per-pupil budget does not readily address. A small school that is housed in a building where it is difficult to run cable and whose walls interfere with Wi-Fi signals may face higher Category 2 costs than a larger school where deployment is easier.<sup>15</sup> A district-wide budget provides greater flexibility for applicants to allocate Category 2 resources accordingly.

---

<sup>12</sup> Joint SECA/SHLB Comments at 7 (stating that "the single most important modification that the Commission should adopt is the use of a consolidated Category 2 budget that is administered at the school district and library system level for applicants that have multiple buildings.")

<sup>13</sup> *Id.* at 11 ("Core network equipment such as a core router, switch or wireless controller is used by multiple buildings and its cost must be allocated to a portion of each building's Category 2 budget.").

<sup>14</sup> *Id.* at 10 ("The accounting for Category 2 budgets by building is one of the most complex areas of the E-rate program.").

<sup>15</sup> *See, e.g.*, Council of the Great City Schools Comments at 2 ("The uniform calculation that currently exists does not reflect the varied costs of deploying and maintaining Wi-Fi at school sites.").

As a corollary, if the Commission adopts a district-wide budget approach, and for the further easing of program administration, non-instructional facilities should also qualify for Category 2 funding, so long as the overall district Category 2 funding request remains within budget.<sup>16</sup> Such a change would further promote efficiency in Category 2 network designs and purchasing decisions without burdening the fund beyond the budgeted amount that the Commission had previously deemed reasonable. Non-instructional facilities, while not used directly to educate children, most certainly support the applicant's educational mission, and must, therefore, be connected to the school's WAN. As a result, allowing Category 2 support for that purpose, within the constraints of the district's overall Category 2 budget, would best advance the goals of E-rate.

Shifting to a district-wide budget approach would also simplify USAC's review of funding requests.<sup>17</sup> Reviewing Category 2 funding requests against a single, district-wide budget, rather than on an individual school basis, with attendant cost allocation calculations, would significantly streamline both the application and the USAC Program Integrity Assurance (PIA) review processes, permitting USAC to make decisions faster while reducing administrative costs.<sup>18</sup>

## **2. The Commission Should Increase the Category 2 Multipliers to \$250.00 per Student and the Minimum Floor Per Building to \$30K**

The Ohio ITCs welcomed the Commission's requirement in the *Category 2 NPRM* for the Bureau to issue a report on its findings after the first four years. The Comments on the *Cat 2*

---

<sup>16</sup> See Joint SECA/SHLB Comments at 23-25; Initial Comments of the State of Alaska and Department of Education at 3 (requesting that the Category 2 "budget should be available for the district or library system to spend at any eligible entity location, including NIF data centers."); E-mpa Comments at 12.

<sup>17</sup> See Joint SECA/SHLB Comments at 10 (highlighting the burden on the applicants and fund administrator created by the current site-specific budget process).

<sup>18</sup> *Id.* at 12 (highlighting the potential for streamlining USAC's administrative procedures).

*Report* overwhelmingly supported an increase in the Category 2 Multiplier to at least \$250.00 and the minimum floor to \$30,000. These numbers were arrived at after careful analyses and surveys of applicants by the E-rate stakeholder community that went beyond the Bureau's findings. Funds for Learning has followed the Category 2 data trends since the inception of the Category 2 budget and finds that the data supports an increase in both of these categories.<sup>19</sup>

Unlike in FY 2015, today, many states are now required to implement one-to-one device programs and perform online testing.<sup>20</sup> That approach dramatically increases the capability requirements for Category 2 equipment and services, and their importance to the quotidian educational efforts of our nation's students. Given how recently the one-to-one approach has emerged, and how quickly it has spread, the Commission did not have the opportunity to consider fully the level of Category 2 resources necessary to meet the demands on schools' internal networks that it creates. The Commission should now seize this chance to revise the Category 2 budget multipliers, and the budget floor for small schools, upward to meet this new challenge.

### **3. The Commission Should Permanently Extend the Category 2 Eligibility of MIBS, Caching, and BMIC**

If not extended, the eligibility of Managed Internal Broadband Services, Caching, and Basic Maintenance of Internal Connections are set to expire on June 30, 2020. The majority of Ohio schools need and utilize these services, and the Ohio ITCs fully support that they are made permanently eligible. In addition, the time has come to streamline and simplify the Category 2

---

<sup>19</sup> See FFL Comments at 2 ("Nationwide, the average C2 budget is \$75,166, nearly eight times greater than the budget floor now in place. Note, too, that between FY 2015 and FY 2019, 47.7% of sites subject to the budget floor did not touch their C2 budgets."); Funds For Learning, "2019 E-rate Trends Report," at 23 (noting that 93% of applicants surveyed favored a move to a district-wide budget), *available at*: <https://www.fundsforlearning.com/2019ErateTrends>;

<sup>20</sup> South Carolina Comments at 4.

application as well by eliminating subcategories.<sup>21</sup> Unless the Commission is exacting a need for data compilation of certain subcategories,<sup>22</sup> it would be more beneficial to simplify the filing requirements. To the extent that the Commission disagrees with the commenters on this subject, then an alternative approach might be to relax the denials and allow correction to take place during any PIA process or audit.

#### **4. CIPA Filtering**

South Carolina claims that the single most critical product not currently eligible is content filtering.<sup>23</sup> The Ohio ITCs agree with SECA and SHLB Comments that nothing is prohibiting the Commission from funding content filtering as required under the Children's Internet Protection Act.<sup>24</sup>

#### **5. Network Security**

In adopting permanent rules for the budget-based Category 2 support approach, the Ohio ITCs also recommend that the Commission establish network security and monitoring services as eligible for support.<sup>25</sup> Schools are becoming more frequent targets of ransomware attacks and other hackers.<sup>26</sup> Citing the recent ransomware attacks on the Louisiana school system that caused the Governor to declare a state of emergency, CoSN explains that, “[t]he risks to school systems are only increasing as the number of data breaches and cyberattacks increase every year.”<sup>27</sup>

---

<sup>21</sup> See Joint SECA/SHLB Comments at 26 (supporting the elimination of Category 2 subcategories.)

<sup>22</sup> See EducationSuperhighway Comments at 5.

<sup>23</sup> South Carolina Comments at 3; *see also* Fortinet Comments at 2 (stating that “[r]equiring schools to provide security without providing funding is requiring the school to comply with an unfunded mandate.”)

<sup>24</sup> Consolidated Appropriations Act, 2001. (PL 106-554). Title XVII – Children’s Internet Protection; Subtitle B -- Universal Service Discounts; Section 1721(g). (<https://www.govinfo.gov/content/pkg/PLAW-106publ554/pdf/PLAW-106publ554.pdf>); *see* Joint SECA/SHLB Comments at 27-28.

<sup>25</sup> *See also* ESH Comments at 7.

<sup>26</sup> Comments of ADTRAN, Inc. at 7.

<sup>27</sup> CoSN Cybersecurity Report at 1-2, *attached to* CoSN Reply Comments (filed Sept. 3, 2019).



Such attacks compromise the schools' ability to pursue their educational mission and put the privacy of students' personal information at risk. Indeed, the recent growth in schools' reliance on information technology resources, including one-to-one educational approaches and electronic storage of student identity data, health records, and performance and achievement history, only heighten these risks. In this vein, Aruba confirms that "[n]etwork security solutions are necessary to ensure that schools and libraries can offer students safe, secure and reliable network access and protect sensitive student information from unauthorized disclosure or tampering."<sup>28</sup>

To guard against such attacks in a world of increased dependence on cloud-based services and software technologies, such as software-as-a-service models, software-defined networking, software subscriptions and licensing, schools must move away from a traditional "break-fix" hardware technology environment to an "always-on" vigilance that can respond to security threats in real-time.<sup>29</sup> Moreover, to ensure that these approaches are accessible to all, the Commission should ensure that all of the constituent components are eligible for Category 2 support. As CoSN explains, in the case of the nation's schools, "funding constraints limit the deployment of more advanced cybersecurity tools that are becoming mainstays in other industries. This includes technologies such as intrusion detection/prevention (IDS/IPS), advanced threat protection (ATP), data loss prevention (DLP), distributed denial of services (DDoS) mitigation services, encrypted traffic inspection, comprehensive encryption of data at rest and on mobile devices, multi-factor authentication (MFA), and security information and

---

<sup>28</sup> Aruba Comments at 4.

<sup>29</sup> Cisco Systems Comments at 4 ("Threat attackers are constantly changing their techniques and tactics, often moving quickly to new technologies. School system administrators now require software support models to make sure not only that these systems are up and running, but that they can be safely operated in a dynamic threat environment.")

event management (SIEM).”<sup>30</sup> In light of the vital importance of these services in protecting student privacy and security, as well as maintaining the availability of the educational resources school networks support, all aspects of the services necessary to prevent, deter, and thwart such attacks should be eligible for E-rate support.

#### **6. The Commission Should Eliminate the 3-Year Equipment Transfer Rule**

Current E-rate rules do not permit applicants to transfer equipment to any other eligible entity until after three years of the purchase date or, in the case of temporary or permanent closure, they may transfer the equipment within three years of the date of purchase, but must notify USAC and keep detailed records.<sup>31</sup> Putting the schools and districts back in the driver’s seat when determining where and when equipment may best be transferred and best utilized for the benefit of the students is a smart stewardship of program administration. Applicants will still be required to maintain detailed records of the assets.<sup>32</sup>

#### **C. Ohio ITCs Support a Fixed Five-Year Budget Cycle Commencing in FY2020**

As many commenters agree, it is time to reset the clock. Throughout the past five years, the applicant community has learned that the USAC Category 2 budget reporting tools are incongruent and incorrect. These inconsistencies have amplified compliance risks in the E-rate Program and caused USAC staff and applicants alike to spend an inordinate amount of time on PIA reviews, funding denials, and appeals.<sup>33</sup> The Ohio ITCs support a hard reset of the next five-year budget to begin in FY2020.

---

<sup>30</sup> CoSN Cybersecurity Report at 3.

<sup>31</sup> USAC Transfer of Equipment Procedures at <https://www.usac.org/sl/applicants/before-youre-done/equipment-transfer.aspx> (last visited Aug.31, 2019).

<sup>32</sup> See Comments of the E-rate Professionals Management Association at 11 (“E-mpa Comments”).

<sup>33</sup> See South Carolina Comments at 7; EducationSuperHighway Comments at 5 (stating that “[t]he FCC should direct USAC to no longer deny a Category 2 application simply because that applicant included requests that exceed their remaining Category 2 budget.”)

**Conclusion**

The Ohio ITCs are thankful to the Commission for allowing the opportunity to gather further information from the E-rate stakeholder community. For all of the foregoing reasons, the Ohio ITCs respectfully urge the Commission to make the current budget-based approach to Category 2 funding permanent, after modifying it as described herein.

Respectfully submitted,



Cynthia B. Schultz  
Broadband Law Group, PLLC  
1050 Connecticut Avenue, NW, Suite 500  
Washington, DC 20036  
Tel. (202) 361-6550  
[cschultz@broadbandlawgroup.com](mailto:cschultz@broadbandlawgroup.com)

*Counsel for the Ohio ITCs*